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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/039,340	12/31/2001	George G. Barclay	50727-3C	1545

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EXAMINER

HAMILTON, CYNTHIA

ART UNIT

PAPER NUMBER

1752

DATE MAILED: 09/25/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/039,340

Applicant(s)

BARCLAY ET AL.

Examiner

Cynthia Hamilton

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-5, 8, 23, 24, 35, 41 and 46-63 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4, 5, 23, 24, 35, 41 and 46-63 is/are rejected.
- 7) ☒ Claim(s) 3 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. Applicant has not complied with one or more conditions for receiving the benefit of an earlier filing date under 35 U.S.C. 120 with respect to US Application No. 09/567634 as follows:

The later-filed application must be an application for a patent for an invention which is also disclosed in the prior application (the parent or original nonprovisional application or provisional application); the disclosure of the invention in the parent application and in the later-filed application must be sufficient to comply with the requirements of the first paragraph of 35 U.S.C. 112. See *Transco Products, Inc. v. Performance Contracting, Inc.*, 38 F.3d 551, 32 USPQ2d 1077 (Fed. Cir. 1994). In the instant case, PCT/US01/14914 is shown in WO 01/86353 to have claimed continuation-in-part (CIP) status and not continuation status. Second, there is no disclosure in the original application and claims to polymer comprised of a heteroalicyclic group that is not an anhydride or lactone and is fused to the polymer backbone and that contains one or more oxygen or sulfur ring members as is now found in instant claim 1 and was part of the original disclosure, i.e. original claim 13, in the instant application as well as in PCT/US01/14914. Thus, the effective filing date for claim 1 and all dependent there on is that of PCT/US01/14914 which is May 8, 2001. The examiner notes that PCT/US01/14914 does not have the required reference to US application SN 09/567,634 as a continuation application, but instead appears to have reference to US application SN 09/567,634 as a continuation-in-part application. The inclusion of new matter into PCT/US01/14914 evidenced by claim 13 therein not found in the parent application is indicative that continuation-in-part status is possibly the

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correct status and not continuation status. See particularly OG Notices: 18 March 2003,

Claiming the Benefit of a Prior-Filed Application under 35 U.S.C. 119(e), 120, 121, and 365(c).

2. The disclosure is objected to because of the following informalities: The limitations of original claims 11 and 13 are not found in the original specification but only in claims 11 and 13.

The examiner notes these generic limitations are not found in the parent application 09/567634 anywhere. Claims 11 and 13 are as follows.

11. The photoresist of any one of claims 1 through 10 wherein the heteroalicyclic group fused to the polymer backbone does not contain an unsaturated oxygen.

13. The photoresist of any one of claims 1 through 11 wherein the heteroalicyclic group fused to the polymer backbone is not an anhydride or lactone.

See particularly MPEP 608.01(1) and 37 CFR 1.17 (a) cited below:

### **608.01(l) Original Claims**

In establishing a disclosure, applicant may rely not only on the description and drawing as filed but also on the original claims if their content justifies it.

Where subject matter not shown in the drawing or described in the description is claimed in the application as filed, and such original claim itself constitutes a clear disclosure of this subject matter, then the claim should be treated on its merits, and requirement made to amend the drawing and description to show this subject matter. The claim should not be attacked either by objection or rejection because this subject matter is lacking in the drawing and description. It is the drawing and description that are defective, not the claim.

It is, of course, to be understood that this disclosure in the claim must be sufficiently specific and detailed to support the necessary amendment of the drawing and description.

#### ***37 CFR 1.71. Detailed description and specification of the invention.***

(a) The specification must include a written description of the invention or discovery and of the manner and process of making and using the same, and is required to be in such full, clear, concise, and exact terms as to enable any person skilled in the art or science to which the invention or discovery appertains, or with which it is most nearly connected, to make and use the same.

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Appropriate correction is required. The examiner suggests applicants consider addition to the specification of other limitations that may be present in the original claims filed in this application and present in the PCT application if continuity is to be maintained that are not present in the specification and as yet have not been found by this examiner.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 61-62 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 61-62 recite the limitation "The method of claim 1 " in line 1. There is insufficient antecedent basis for this limitation in the claim because there is no method in claim 1 to further limit. These limits to specific exposure conditions do not make sense in view of claim 1 since there is no apparent limitation set on the compositions by the limits set forth. Anything can be exposed to a radiation at any wavelength. There is no requirement that anything happens upon exposure.

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an

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international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-2, 4-5, 8, 35, 41, 46-47 and 51 are rejected under 35 U.S.C. 102(b) as being anticipated by Jung et al (GB 2320718A). Jung et al in Examples III and V present compositions which anticipate the instant composition where in Jung et al the fused heteroalicyclic group is the carbonate of Formula IV in claim 1 of Jung et al. The t-butyl group is the photoacid labile moiety. There are no aromatic rings present. The process of imaging with these compositions is set forth in Example VIII and page 6 of Jung et al which anticipates the method of instant claim 35 and the coated wafer of instant claim 41. The first set of claims 5-6, 54 and 61 of Jung et al disclose processes and compositions and coated articles. Thus with respect to instant claims 1-2, 4-5, 8, 35, 41, 46-47 and 51, Jung et al anticipates the instant invention. In Jung et al, see particularly page 6, Examples III, V and page 13.

8. Claims 1-2, 4-5, 23-24, 35 and 41 and 46, 48-54, 56-63 are rejected under 35 U.S.C. 102(e) as being anticipated by Jung et al (6,150,069). The compositions, articles of manufacture and methods of forming relief images of Jung et al anticipate the instant compositions, articles and methods of claims 1-2, 4-5, 23-24, 35 and 41 and 46, 48-54, 56-63 wherein oxygen is the heteroatom in the fused ring. In Jung et al, see col. 2, lines 6-61, col. 3, lines 1- col. 6, lines 37, and Examples.

9. Applicant's arguments filed June 30, 2003 have been fully considered but they are not persuasive. Applicants' allegations that Jung et al (6,150,069) does not have heteroalicyclic groups that are fused to a polymer backbone that are not anhydride or lactone groups is not true.

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The rejection stands with the added new claims. The heterocyclic group is held as the rings only and not the attached - C=O - group not part of the cyclic structure. Applicants presented no arguments with respect to Jung et al (GB 2320718A).

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 1-2, 4-5, 24, 35, 41, 46, 48-50, 52-54, and 56-63 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Nishi et al (6,566,038 B2). With respect to instant claims 1-2, 4-5, 24, 35, 41, 46, 48-50, 52-54, and 56-63, Nishi et al disclose a species which reads on the instant invention with the exception of giving an example wherein the third optional monomer unit of the polymer used as set forth in col. 10-13 has  $X = O$ . However, such are clearly disclosed by Nishi et al as options for  $X$  of which there are only two, i.e.  $-CH_2-$  or  $-O-$ . Thus, the choice of  $X = O$  is immediately envisionable and thus anticipatory of the instant invention or are immediately obvious as one of two choices in the instant polymers for the optional units which always require  $X$  present. In Nishi et al, see particularly the Summary of the Invention, col. 18, lines 30-68 and claim 2.

12. Claims 47 and 55 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. What is meant by "a polymer unit separate from the heteroalicyclic group of carbon alicyclic group" is unclear. Should this be "heteroalicyclic group and carbon alicyclic group" ?

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13. Claims 3 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

14. The terminal disclaimer filed on 6-30-03 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of US Patent No. 6,306,554 has been reviewed and is accepted. The terminal disclaimer has been recorded.

15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

*Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cynthia Hamilton whose telephone number is (703) 308-3626. The examiner can normally be reached on Monday-Friday, 9:30 am to 5:00 pm.*

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*If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Janet Baxter can be reached on (703) 308-2303. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.*

*Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 305 0661.*



CYNTHIA HAMILTON  
PRIMARY EXAMINER

Primary Examiner Cynthia Hamilton  
September 13, 2003

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Primary Examiner Cynthia Hamilton  
September 13, 2003